

KLHUKOVA, E.; POSPISIL, R.

Results of the study on the cholinesterase level in the blood in organic phosphate workers. Prac. lek. 13 no.8/9:406-407 N '61.

1. KHES-Brno, odd. hygieny prace, prednosta MUDr. K. Spasler.

(CHOLINESTERASE blood) (INSECTICIDES toxicol)

KLHUFKOVA, Eva, RNDr.; KREISLER, Herman, MUDr., JUDr.

Automatic varnish spreaders viewed by a hygienist. Drevo 17
no.3:74-78 Mr '62.

1. Oddeleni hygieny prace, Krajska hygienicko-epidemiologicke
stanice, Brno (for Klhufkova). 2. Lekar-hygienik, Revolučni
odborove hnutí, Ustřední výbor odborové skupiny zaměstnanců
spotřebního průmyslu, Praha (for Kreisler).

SEVCIK, M.; CHALUPA, B.; HRAZDIRA, C.L.; KLHUKOVA, E.; SYNKOVA, J.

Acute group poisoning with active organic phosphates. Prac. lek. 14
no.7:317-321 S '62.

1. Klinika nemoci s povelani v Brne, prednosta doc. gr. J. Vyskocil.
(PHOSPHORUS POISONS ORGANIC) (NEUROLOGY)

KONECNA, D.; KLHUVKOVA, E.; SONEK, M.; CERNOCH, A.

Menstruation disorders in women working with aromatic carbo-
hydrates. Cesk. gynek. 28 no.7:504-508 S '63.

1. II gyn.-por. klin. lek. fak. UJEP v Brne, prednosta doc.
dr. M. Uher, CSc. Oddeleni hyg. prace KHS v Brne, vedouci dr.
K. Spasler Gyn.-por. klin. UDL v Praze, prednosta doc. dr.
A. Cernoch.

(MENSTRUATION DISORDERS)	(AIR POLLUTION)
(TOLUENE)	(BENZENE)
	(ACETATES)

SEVCIK, M.; CHALUPA, B.; KLHUVKOVA, K.; HRAKDIRA, C.L.

Survey of health conditions in electric-welders. Pracovní lek.
12 no.5:229-235 Je '60.

1. Klinika chorob z povolani v Brne, prednosta doc. MUDr. K. Kadlec;
Oddeleni hygieny prace KHM v Brne, reditel MUDr. A. Svoboda; Neuro-
logicka klinika v Brne, prednosta prof. MUDr. K. Popak.
(INDUSTRIAL MEDICINE)

KLIAVA, G.

KLIAVA, G.

GENERAL

PERIODICAL: VESTIS: No. 1, 1958

KLIAVA, G. Sociometry of marasmus of contemporary bourgeois sociology. p. 39

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclasa.

KLIACHKO, V.R.

Ten years of experience in the treatment of thyrotoxicosis with
antithyroid preparations. Probl. endon. 1 gora. 6 no.6:57-65 '60.
(MIRA 14:2)

(HYPERTHYROIDISM)

KLIAVA, G. [Klava, G.] (Riga)

P.I. Stucka about revolutionary legality. In Russian. Vestis Latv
ak no.4:55-64 '60. (KRAI 10:7)

1. Akademiya nauk Latvyskoy SSR, Institut ekonomiki.
(Stucka, Peters) (Revolutions)

KLIBANOV, S.G.

New design of the screen filter for water. Tekst. prom. 24
no.11:66-67 N '64. (MIRA 17:12)

KLIBANOV, S.T., insh.

Devices for a mechanized assembly of chain conveyors. Mekh. i
avtom. proizv. 18 no.6137-38 Ja '64. (MIRA 1719)

KLIBANOV, S.T., insh.

Grinding of card clothing of the take-in card cylinder. Tekst.
prom. 25 no.3:31-32 Mr '65. (MIRA 18:5)

1. Kombinat tekhnicheskikh tkaney "Krasnyy Mayak" Soveta
narodnogo khozyaystva Leningradskogo ekonomicheskogo rayona.

GERASKIN, V.N.; KALOSHIN, A.F.; KLIBANOV, S.T.

Completely mechanized carding section. Tekst. prom. 25 no.10;
26-30 0 '65. (MIRA 18:10)

1. Glavnyy inzh. kombinata tekhnicheskikh tkaney "Krasnyy mayak"
(for Gerakin). 2. Glavnyy mekhanik kombinata tekhnicheskikh
tkaney "Krasnyy mayak" (for Kaloshin). 3. Nachal'nik lentochno-
rovnichnogo tsukha kombinata tekhnicheskikh tkaney "Krasnyy
mayak" (for Klibanov).

KLIBANOV, Ye. F.

157T34

USSR/Electricity - Cable Industry
Cables, Electric

Nov 49

"Achievements and Tasks of the Cable Industry," Ye. F. Klibanov, Engr, Stalin Prize Laureate, N. I. Belorusov, Engr, Glavkabel', Min of Elec Ind, 5 pp

"Vest Elektro-Prom" No 11

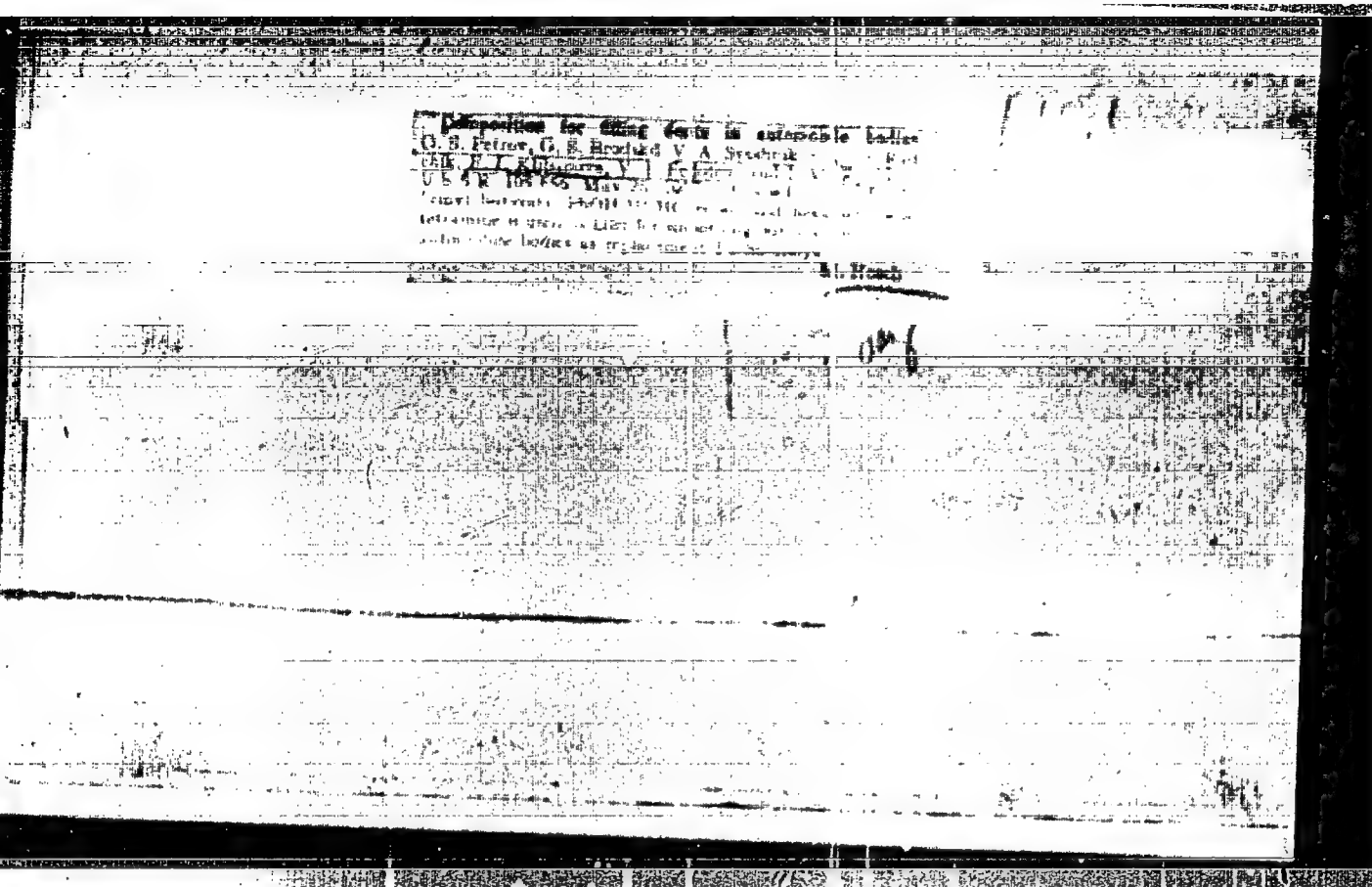
Lists landmarks in history of USSR cable industry. Discusses manufacture of bare cables, power cables with paper insulation, communications cables, rubber insulated wires and cables and winding conductors. Includes four diagrams.

157T34

ARNAUTOV, V.T.; BARANOV, V.M.; DONSKOY, S.A.; PASTUKHOV, A.I.; SHIRNOV, I.A.;
TORSHILOV, Yu.V.; TRET'YAKOV, M.A.; UDOVENKO, V.G.; FREYLENZON, Ye.Z.;
SHCHEKALEV, Yu.S.; Prinimali uchastiye: MAKAYEV, S.V.; KOMPANIYETS,
G.M.; NAGOVITSYN, D.F.; NOVOLODSKIY, P.I.; VARSHAVSKIY, V.L.;
KOROGODSKIY, V.G.; KLIBANOV, Ye.L.; MEDVEDEVSKIKH, Yu.; TALANTSEVA,
T.I.; DUBROV, N.F.; DZEMYAN, S.K.; TOPYCHKANOV, B.I.; CHARUSHNIKOV,
O.A.; KHARITONOV, Yu.A.

Developing and mastering the technology of converting vanadium
cast iron in oxygen-blown converters with a 100 ton (4g) capacity.
Stal' 25 no.6:504-508 Je '65. (MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Makayev, Kompa-
niyets, Nagovitsyn, Novolodskiy, Varshavskiy, Korogodskiy, Klibanov,
Medvedevskikh, Talantseva). 2. Ural'skiy nauchno-issledovatel'skiy
institut chenykh metallov (for Dubrov, Dzemyan, Topychkanov, Charush-
nikov, Kharitonov).



А.И. Купцов, П.И.
NIKIFOROVA, Ye.D.; KLIRANOVA, F.I.

Industrial painting of the Volga automobiles. Avt.i trakt.prem.
no.9:30-32 8 '57. (MIRA 10:11)

1. Gor'kovskiy avtosavod.
(Automobiles--Painting)

KLIBANOVA, F.I.

KISELEV, I.I.; BORISOV, M.I.; YASINOVSKIY, B.S., insh.; SANNIKOV, Yu.K., insh.;
 SOKOLOV, V.A., insh.; LEVCHENKO, L.D., insh.; MALOYEV, G.A., insh.;
 CHICHAKOV, K.K., insh.; BARIKIN, V.I., insh.; FRYDELIN, A.Ya., insh.;
 GULYAYEV, A.I., insh.; STIGNEYEV, Ya.F., insh.; SHAGANOVA, K.N., insh.;
 KHELIMSKIY, I.Ye., insh.; AVROV, A.N., insh.; DEMIDOVA, M.I., insh.;
 NIKIFOROVA, Ye.D., insh.; KLIBANOVA, F.I., insh.; CHIVKUNOV, K.I.,
 insh.; STOROZHIKO, I.G., insh.; NOVAKOVSKIY, Ye.Ya., insh.; GORYKHIN, A.O., insh.;
 TARASOV, A.M., insh.; SHISHKO, A.P., insh.; UVAROV, P.T., ekonomist;
 DRAGUNOV, M.V., ekonomist; KARANDASHOV, A.A., ekonomist; KONKIN, M.V., ekonomist;
 GOREV, M.S., ekonomist. Pri-
 nimali uchastiye: LAPIN, T.I.; RAMENSKIY, Yu.A.; KADINSKIY, B.A.;
 SOKOLOV, S.D.; STOROZHIKO, I.G.; FOMINYKH, A.I.. POLYAKOVA, N.,
 red.; SMIRNOV, G., tekhn.red.

[Organisation and improvement of production; practices of the
 Gorkiy Automobile Plant] Organizatsiya i sovershenstvovanie
 proizvodstva; opyt Gorkovskogo avtomobild. Moskva, Gos. ind-va
 polit. lit-ry, 1958. 332 p. (MIRA 12:2)

1. Direktor Gorkovskogo avtomobil'nogo zavoda (for Kiselev).
2. Glavnyy inzhener Gorkovskogo avtomobil'nogo zavoda (for Borisov).
3. Gorkovskiy avtomobil'nyy zavod (for all except Kiselev, Borisov,
 Polyakova, Smirnov).

(Gorkiy--Automobile industry)

SOV/112-57-9-19810

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 9, p 269 (USSR)

AUTHOR: Alekseyev, A. S., Zhelestsov, N. A., Klibanova, I. M.

TITLE: Multivibrator Synchronization by Periodically-Recurrent Pulses
(O sinkhronizatsii mul'tivibratora periodicheski povtoryayushchimiya impul'sami)

PERIODICAL: Uch. zap. Gor'kovsk. un-t, 1956, Nr 30, pp 206-228

ABSTRACT: By the method of point transformations, the problem was investigated of synchronizing a multivibrator with one RC circuit by periodically-recurrent pulses, the duration of which is much shorter than the period of the multivibrator oscillations. As a result of the analysis, a part of the system parameter space was broken up into regions of various periodic motions. It has been shown that along with regions of simple synchronization, there are regions of various complex types of synchronization in the parametric space. For each of the parametric space regions, the problem was solved of the quantity, shape, and stability of simple and complex periodic (synchronized)

Card 1/2

SOV/112-57-9-19810

Multivibrator Synchronization by Periodically-Recurrent Pulses

multivibrator oscillations. The theoretical findings were subjected to a qualitative experimental check on a multivibrator hookup. To synchronize the multivibrator, square pulses with variable period and amplitude were used. During the experimentation, simple as well as complicated stable synchronization conditions were observed. The experimentally-found curves qualitatively confirm the theoretical curves. Presented are oscillograms of multivibrator self-oscillations and of simple synchronized oscillations in the intervals of which there fall 5 and 15 periods of external pulses, respectively. As pulse amplitude increased, more complicated stable synchronizing conditions changed into less complicated, in the sequence predicted by the theory. Oscillograms of complicated synchronized multivibrator oscillations are presented.

N.A.T.

Card 2/2

KLIMANOVA, S.B.

TALITSKIY, A.V., prof.; LEVIN, M.I., doktor tekhn. nauk; KLIMANOVA, S.B.,
inzh.

Device on twisting and insulating machines for checking the resistance
of cable conductors. Trudy NII no.13:144-150 '53. (MIRA 1184)

1. Moskovskiy energeticheskiy institut im. V.M. Molotova, Kafedra
elektroprilobrestroyeniya.

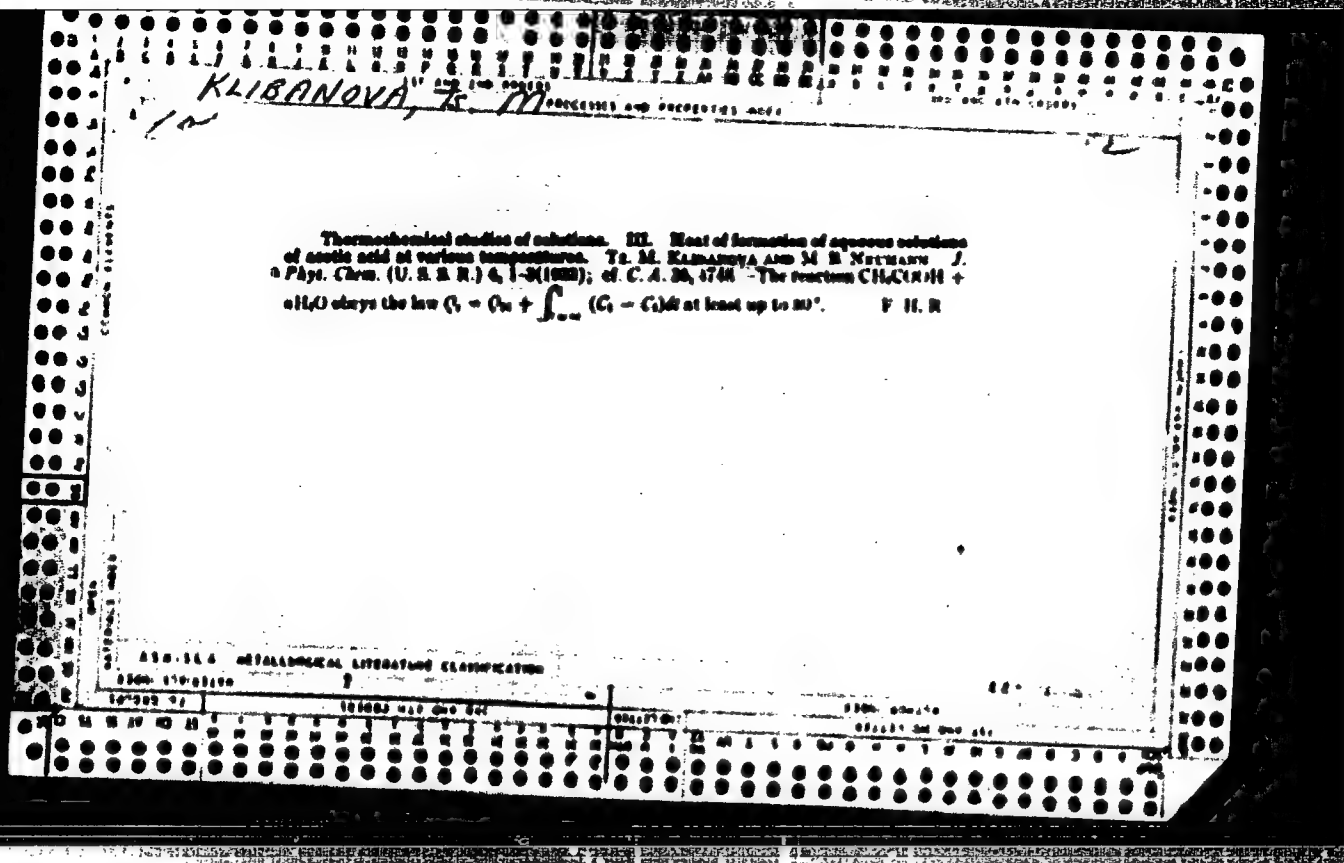
(Electric cables—Testing)

KLIBANOVA, T.; FISCHYSKAYA, L.

New textbook on commerce ("Soviet trade economics." Reviewed by
T. Klibanova, L. Fischiskaia). Sov. torg. no. 4:52-54 Ap '58.
(Russia—Commerce) (MIRA 11:4)

KLIBANOVA, T.

A book on the development of commerce in Georgia ("Basic stages of the development of Soviet trade in Georgia" by A.A.Ovelesiani. Reviewed by T.Klibanova). Sov.torg. 33 no.2:54-55 F '60. (MIRA 13:5)
(Georgia--Commerce) (Ovelesiani, A.A.)



2495. IGNITION OF CARBON AND KINETICS OF ITS REACTION WITH OXYGEN.
Klibanova Ts M and Frank Kamenetskiĭ D A (Acta Physicochim.
U.R.S.S. 1943, 18, 378-405; Chem abstr 1943, 39, 857). A study
of the kinetics of the reaction of O gas on a C filament made smooth
by prolonged heat treatment in hydrocarbon vapours shows that at
1200 K., the abs reaction velocity is approx. 10⁻⁴ moles/sq cm sec
the energy of activation is 100 ± 30 cal mole and the order of
reaction is between 0.4 and 0.8 with respect to O₂.

5(4) .

SOV/76-33-4-19/32

AUTHORS: Dobychin, D. P., Klivanova, To. M.

TITLE: Model Study on the Regeneration of Alumosilicate Catalysts for Cracking (Model'noye izucheniye regeneratsii alyumosilikatnykh katalizatorov krekinga). 1) Methods of Investigation and the Distribution of Coke in the Particle of a Spherical Alumosilicate Catalyst (1. Metodika issledovaniya i raspredeleniye koksa v chastitse sharikovogo alyumosilikatnogo katalizatora)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 4, pp 869-876 (USSR)

ABSTRACT: In 1947 irrespective of other investigations the coke combustion kinetics with alumosilicate cracking catalysts under model conditions was started which was completed in 1949. The experimental results which were obtained during this period (Refs 10-12) under similar conditions are discussed in the explanations of the combustion kinetics. The present investigations were carried out at spherical alumosilicate catalysts (AC) (Refs 3, 13) because the round shape and the transparency of the particles favor the investigation of the combustion process. The principle of the methods of investigation is

Card 1/3

Model Study on the Regeneration of Aluminosilicate Catalysts for Cracking.
 1. Methods of Investigation and the Distribution of Coke in the Particle
 of a Spherical Aluminosilicate Catalyst

SOV/76-33-4-19/32

the photographing of the shifting of the coke combustion boundary in the sphere and a simultaneous determination of the amount of burnt coke by a continuous weighing of the sphere on a torsion balance (Fig 1). The weighing is done by means of two microscopes of the type MIR-1 while the temperature was measured by means of a potentiometer PP-1. The picture of combustion was taken by a camera "Sport" (with a telephoto lens "PED" and an ancillary lens "PED-2"). The diameter of the coked zone of the sphere was then measured by a measuring microscope MIR-12 (Fig 1, some pictures of different stages of combustion). The experiments were carried out by means of a finely porous ball catalyst put at the disposal by E. M. Kaganova and B. L. Moldavskiy the coke accumulation was carried out in a test apparatus (Fig 3) using the kerosene-gasoline fraction of an Artem-Kalgobek petroleum. A comparison of the kinetic curves of the intensity of the coked spherical zones (Figs 5, 6) shows that the major part of the separated coke, approximately 60%, lies on the surface and that after a layer thickness of 0.2 mm (Figs 8, 9) is attained

Card 2/3

Model Study on the Regeneration of Aluminosilicate Catalysts for Cracking.
1. Methods of Investigation and the Distribution of Coke in the Particles
of a Spherical Aluminosilicate Catalyst

SOV/76-33-4-19/32

a sharp decline in the concentration of the coke layer accumulated in cracking may be observed. The observations made led to the assumption that the process of regeneration of the catalyst may be divided into two stages- the combustion of the external coke layer and the combustion of coke which had accumulated in the pores, with the latter taking place in the inner range of diffusion (Fig 11). It was found experimentally (Table) that within the (AC) sphere the temperature during the regeneration process is practically equal to that of the passing gas flow. There are 11 figures, 1 table, and 15 references, 10 of which are Soviet.

ASSOCIATION: Leningradskiy nauchno-issledovatel'skiy institut po pererabotke nefli i polucheniyu iskusstvennogo zhidkogo topliva
(Leningrad Scientific Research Institute for Petroleum Processing and the Production of Synthetic Liquid Fuels)

SUBMITTED: September 6, 1957

Card 3/3

5.(4)

AUTHORS:

Dobychin, D. P., Klivanova, Ts. M. SOV/76-33-5-10/33
(Leningrad)

TITLE:

A Model Investigation of the Regeneration of Aluminum Silicate Catalysts of Cracking (Model'noye izucheniye regeneratsii alyumosilikatnykh katalizatorov krekinga). 2. Combustion of the Coke Deposited on the Surface and General Kinetic Laws of the Process (2. Vygoraniye poverkhnostnogo koksa i obshchiye kineticheskiye zakonomernosti protsesssa)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 5,
pp 1023-1029 (USSR)

ABSTRACT:

A previous investigation by the author showed (Ref 1) that more than half of the coke deposit is on the catalyst surface and the remainder is evenly distributed inside the catalyst. Therefore, two processes can be distinguished in combustion, one taking place on the surface, the other inside. This paper deals with the first process. At first, the dependence of combustion on the speed of the gas current is measured (Fig 1). Since the experiments were carried out under almost laminar flowing conditions, the combustion rate could not depend on the speed of the gas current. By applying the V. V. Pomerantsev

Card 1/3

A Model Investigation of the Regeneration of Aluminum Silicate Catalysts of Cracking. 2. Combustion of the Coke Deposited on the Surface and General Kinetic Laws of the Process SOV/76-33-5-10/33

method it was determined that combustion takes place in the outer kinetic range only (Fig 1). Figure 3 shows the dependence of the combustion rate on the oxygen concentration. Direct proportionality occurs. The influence of temperature on the combustion rate is shown in figures 4, 5, and 6. Figure 7 shows that at temperatures of about 560° and below, combustion does no longer take place on the surface only and, therefore, the rate becomes dependent on the thickness of the coke layer. The investigation of the effect of carbonic acid on the combustion rate (Fig 8) shows that the effect can be disregarded up to 600° and a content of 14 volume% of CO₂. The kinetics

of the combustion of the surface layer can be expressed by the equation $w = A [O_2] \cdot e^{-E/RT} = 0.22 [O_2] \cdot e^{-13000/RT}$ (g/cm².sec).

w = combustion rate with regard to 1 cm² of the surface,
[O₂] = the relative oxygen content with respect to the oxygen concentration of air under equal conditions and atmospheric pressure. There are 8 figures, 2 tables, and 15 references.

Card 2/3

A Model Investigation of the Regeneration of Aluminum Silicate Catalysts of Cracking. 2. Combustion of the Coke Deposited on the Surface and General Kinetic Laws of the Process SOV/76-33-5-10/33

11 of which are Soviet.

ASSOCIATION: Institut po pererabotke nefi i polucheniyu iskustvennogo zhidkogo topliva Leningrad (Institute of Petroleum Refining and Production of Synthetic Liquid Fuels, Leningrad)

SUBMITTED: September 26, 1957

Card 3/3

DOBYCHIN, D.P.; KLIBANOVA, T.B.; TOINS, O.M.

Calculation of the kinetics of the process taking place in
the reactor from the data of modeling experiments with a
single pellet. Zhur.prikl.khim. 33 no.7:1519-1526
Jl '60. (MIRA 13:7)

(Catalysts) (Cracking process)

DOBYCHIN, D.P.; KLIRANOVA, TS.M.

Model study of the regeneration of aluminosilicate cracking catalysts.
Part 3: Diffusion Kinetics of the burning out of the internal carbon
and the effect of the porous structure of the catalyst on the rate
of the process. Zhur. fiz. khim. 34 no.8:1745-1752 Ag '60.
(MIRA 13:9)

1. Leningradskiy institut po pererabotke nefi.
(Aluminosilicates)

KLIBANSKIY, I. B. Cand Tech Sci -- "Study of factors affecting the fatigue
endurance and durability of diesel-engine ^{connecting rods} ~~rods~~" Minsk, 1960 (Min of Higher
and Secondary Specialized Education BSSR, Belorussian Polytechnic Inst im I.V.
Stalin). (KL, 1-61, 193)

-195-

KLIBANSKIY, I.B.

Endurance test of connecting rods of internal combustion engines
with cyclic loading under simulated operating conditions. Sbor.
trud. Inst. mash. i avtom. AN BSSR no. 2:3-28 '61. (MIRA 15:3)
(Fatigue testing machines) (Connecting rods—Testing)

KLIBANSKIY, I.B.

Machine for full scale endurance tests of connecting rods. Zav.lab. 27
no.3:344-345 '61. (MIRA 14:3)

1. Institut mashinovedeniya Akademii nauk BSSR.
(Connecting rods—Testing)

ALEKSANDROV, B. I., kand.tekh.nauk.; KLIBANSKIY, I. B., kand.tekh.nauk.

Effect of material and technological factors on the strength endurance
of the connecting rod of a tractor engine. Acta techn Hung 35/36:319-330.
'61

KLIBANSKIY, I.B.

*7R
15*

PHASE I BOOK EXPLOITATION

SOV/6025

Soveshchaniye po ustalosti metallov. 2nd., Moscow, 1960.

Tsklicheskaya prochnost' metallov; materialy vtorogo soveshchaniya po ustalosti metallov, 24 - 27 maya 1960 g. (Cyclic Metal Strength; Materials of the Second Conference on the Fatigue of Metals, held May 24 - 27, 1960) Moscow, Izd-vo AN SSSR, 1962. 338 p. Errata slip inserted. 1200 copies printed.

Resp. Ed.: I. A. Odintsov, Corresponding Member of the Academy of Sciences of the USSR; Ed. of Publishing House: A. M. Chernov; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgists.

COVERAGE: The collection contains papers presented and discussed at the second conference on fatigue of metals, which was held at the Institute of Metallurgy in May 1960. These papers deal with the nature of fatigue fracture, the mechanics of formation

Card 1/8

Cyclic Metal Strength (Cont.)

SOV/6025

and growth of fatigue cracks, the role of plastic deformation in fatigue fracture, an accelerated method of determining fatigue strength, the plotting of fatigue diagrams, and various fatigue test methods. New data are presented on the sensitivity of high-strength steel to stress concentration, the effect of stress concentration on the criterion of fatigue failure, the effect of the size factor on the strength of metal under cyclic loads, and results of endurance tests of various machine parts. Problems connected with cyclic metal toughness, internal friction, and the effect of corrosion media and temperature on the fatigue strength of metals are also discussed. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

NATURE OF FATIGUE FRACTURE

Oding, I. A. Diffusionless Mechanism of Formation and Growth of a Fatigue Crack
Card 2/2

3

2

Cyclic Metal Strength (Cont.)

30V/5025

Oladyrevskaya, S. A., L. V. Ignatyuk, and V. A. Svetitskiy. Unit for the Study of Corrosion Fatigue of Metals

250

Aleksandrov, B. I. Effect of Temperature and Steel History on the Endurance Limit of Oxidation-Resistant and Heat-Resistant Steels and Alloys

257

Oding, I. A., and Yu. V. Kostochkin. Effect of Temperature Variations on the Strength of the Metal of Gas-Turbine Blades

267

Rakhman, B. M. Procedure of Thermal Fatigue Test Under Given Stresses

276

FATIGUE STRENGTH OF MACHINE PARTS

Aleksandrov, B. I. and I. B. Klibanskiy. Study of the Endurance of Tractor-Engine Connecting Rods

284

Card 8/9

KLIBANSKIY, I.B., kand. tekhn. nauk; SVETLOV, A.I., inzh.

New machines for endurance tests and some results of these tests.
Nauka - proizv. no.1:62-79 '63.

(HRA 18:3)

KLIBASHEV, K. P.

USSR/Meteorology - Scientific Cooperation May 52

"Strengthening the Bond Between Hydrological Science and Production," A. I. Chebotarev, K. P. Klibashev

"Meteorol i Gidrol" No 5, pp 3-7

Authors state that, in accordance with the policy of cooperation in the Hydroelectric/not further identified/Project, the chief of limnology, Ye. N. Belyuk, with the assistance of A. P. Braslavsky, computed the dimensions of waves on the Volga and Don water supply tank under

229782

construction; and, under guidance of Z. A. Vilkina and A. P. Braslavsky computed the evaporation from the surface of Kuybyshev and Stalingrad water supplies. State that N. Ye. Kondrat'yev devised a method for calcs the shape of shores of water supplies under action of wind waves. Many other improvements are under way, authors note.

229782

CHIBOTAROV, Aleksandr Ivanovich; KLIRASHOV, Konstantin Pavlovich; ALKHEMYEV,
G.A., otvetstvennyy redaktor; YASNOGOLITSKAYA, M.M., redaktor;
BRAYNINA, M.I., tekhnicheskiy redaktor

[Hydrological calculations; a collection of exercises] Gidrologicheskie
raschety; sbornik uprasnenii. Leningrad, Gidrometeorologicheskoe
izd-vo, 1956. 295 p. (MLB 10:1)
(Hydrology--Problems, exercises, etc.)

3(7)

AUTHOR:

Klibashev, K. P.

SOV/50-59-5-21/22

TITLE:

Conference of the Scientific Council of the State Hydrological Institute on the Results of Scientific Research Work in 1958 (Seaniya Uchenogo soveta Gosudarstvennogo gidrologicheskogo instituta po itogam nauchno-issledovatel'skikh rabot 1958 g.)

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 5, pp 62 - 63 (USSR)

ABSTRACT:

The general meetings of the Council on the results of 1958 took place on January 12-17, 1959. 16 reports were delivered. K. P. Vokresenskiy presented the results of investigation of water reserves in the newly won lands and fallow lands, as well as the results of the working out of new methods for calculating the water discharge in those areas. A. P. Braslavskiy described a new method of calculating the water conservation of the lakes without discharge in North Kazakhstan, and the amount of possible water extractions from these lakes. P. P. Voronkov reported on the fundamentals of the new direction in investigating hydrochemical conditions of the surface water, and on the results obtained in this respect on the basis of

Card 1/4

Conference of the Scientific Council of the State SOV/50-59-5-21/22
Hydrological Institute on the Results of Scientific Research Work in 1958

extensive expeditions. A. A. Pugin reported on the use of aerial photographs for an accurate determination of the dimensions of the catchment drainage areas of rivers, of the lake surfaces, and of other hydrographic features. V. G. Andreyanov dealt in his report with the investigation of the discharge distribution within one year on the basis of equations for the water and heat balance. M. Ye. Kondrat'yev and I. V. Popov spoke on the use of aerial photographs for investigating the deformation of position of the river bed, and on the results obtained in this respect. A. V. Karashev spoke on the calculation of wind-tide wind-backtide phenomena (sgonno-nagonnnoye yavleniye). He described a method worked out by him for calculating these phenomena with the use of the equation for turbulent diffusion. A. R. Konstantinov reported on his modifications to the methods of calculating the surface evaporation on the mainland applied to the use of data of meteorological net observations. P. P. Kus'min put forward the results of investigations over many years of the conditions of formation of a snow cover and the laws of distribution of

Card 2/4

Conference of the Scientific Council of the State SOV/50-59-5-21/22
Hydrological Institute on the Results of Scientific Research Work in 1958

the snow cover. K. Ye. Ivanov reported on the further development of his former theory of water motion in closed upper-course peat-bog areas, and on the important roles of water motion found by him, which cause the overmoistening of peat deposits. A. K. Proskuryakov, A. M. Gavrilov, and V. V. Ukhonov reported on the working out of a method of considering the discharge for the use of hydroelectric power stations, and on the development of the methods of a hydrological mass observation on the rivers. L. R. Struzer and S. S. Ginko reported on the building of a special test construction - a gradient mast - at the Valdayskaya gidrologicheskaya laboratoriya (Valday Hydrological Laboratory). Together with the other devices of the Laboratory it will be able to determine all the elements of water conservation in the forest. M. S. Grushevskiy reported on the possibility of using electronic computers for the solution of tasks of river hydraulics. A. I. Chebotarev spoke

Card 3/4

Conference of the Scientific Council of the State SOV/50-59-3-21/22
Hydrological Institute on the Results of Scientific Research Work in 1958

on the introduction of results of scientific research by the
OGI into practice.

Card 4/4

S/050/60/000/05/20/020
B007/B014

AUTHOR: Klibashev, K. P.

TITLE: Meeting of the Uchenyy sovet Gosudarstvennogo gidrologicheskogo instituta (Scientific Council of the State Hydrological Institute) on the Achievements of Scientific Research Work in 1959 ✓

PERIODICAL: Meteorologiya i gidrologiya, 1960, No. 5, pp. 65-66

TEXT: The Uchenyy sovet Instituta (Scientific Council of the Institute) held a meeting at the Gosudarstvennyy gidrologicheskii institut (State Hydrological Institute) in January-February, 1960. The meeting was devoted to the scientific research work made in 1959. A report on this meeting is given here. During 1959, the above-mentioned Institute carried through methodical expeditions to study such problems as the hydrometry of mountain rivers, the sediment runoff, ice conditions, transformation of river banks, and the silting of water basins. In his lecture, O. N. Borank reported on provisional results yielded by such investigations. T. N. Makarevich lectured on methodical investigations ✓

Card 1/4

Meeting of the Uchenyy sovet Gosudarstvennogo
gidrologicheskogo instituta (Scientific Council
of the State Hydrological Institute) on the
Achievements of Scientific Research Work in 1959

S/050/60/000/05/20/020
B007/B014

and on the practice in the field of hydrological forecasts in the north-
west of the USSR. The UGMS (Hydrometeorological Service Administration)
was mentioned. G. A. Alekseyev spoke on the calculation of maximum
water deliveries. N. Ye. Kondrat'yev, V. A. Uryvayev, and A. M. Gavrilov
dealt with extensive experimental investigations in the field of non-
stabilised water movements in natural river beds. They were conducted on
the rivers Tvertsa and Oredesh in summer of 1959 in cooperation with the
Tsentral'nyy institut prognozov (Central Institute of Forecasts). I. V.
Popov submitted a method of establishing basic long-range hydrological
forecasts of the deformation of river- and inundation beds, and the
contents of such forecasts by the example of the Ob' and Irtysh Rivers.
A. V. Karashev dealt with the present state and further prospects in the
study of the sediment runoff. A. K. Proskuryakov and A. M. Dimakyan
spoke on designs of hydrological instruments and their introduction. The
designers of the GGI (State Hydrological Institute) are modernising
Zhestovskiy's vane. Among new instruments worked out are a miniature vane
by Burtsev, a forced drain by Illarionov for the recording pluviometer,

Card 2/4

Meeting of the Uchenyy soviet Gosudarstvennogo gidrologicheskogo instituta (Scientific Council of the State Hydrological Institute) on the Achievements of Scientific Research Work in 1959

S/050/60/000/05/20/020
B007/B014

a drill by Proskov, an automatic hydrostatic water level recorder by Vinogradov. A. G. Bulavko, Manager of the Minskaya gidrometeorologicheskaya observatoriya (Minsk Hydrometeorological Observatory) spoke on the effect of the draining of swamps on the principal elements of water economy in the rivers of the Belorusskoye Poles'ye. M. I. Gurevich submitted his method of forecasting flowoff in summer. N. M. Alyushinskaya reported on the utilization of characteristics of snow melts in forecasts on spring flowoffs. O. I. Krestovskiy offered a calculation of the base flow of small water courses, as well as of losses caused in springtime by evaporation. S. F. Fedorov submitted new information on the influence exerted by forests on hydrological conditions, and on the determination of evaporation in forests by the method of turbulent diffusion. A. R. Konstantinov worked out a method of calculating evaporation coming from the mainland on the basis of experimental data and by proceeding from the equation for turbulent diffusion. A. V. Karaushev and Yu. N. Ivanov reported on investigations of the movement of inundations and silting in water basins. Ye. S. Semenov supplied new data on the daily course of

Card 3/4

Meeting of the Uchenyy soviet Gosudarstvennogo
gidrologicheskogo instituta (Scientific Council
of the State Hydrological Institute) on the
Achievements of Scientific Research Work in 1959

S/050/60/000/05/20/020
B007/B014

river turbidity and on the consideration of this factor in the method
of measuring the flowoff of inundations. V. S. Sumarokov spoke on the
investigation of the bed load of mountain Rivers basing on data by the
Sredneaziatskaya ekspeditaiya (Soviet Central Asia Expedition). V. V.
Dement'yev dealt with the influence of the radiation angle on the accuracy
of the vane indications. ✓

Card 4/4

KLIBASHEV, K.P.

Scientific conferences at the State Hydrological Institute on the work
results of 1960. Meteor. i gidrol. no. 64-65 Je '61. (MIRA 14:5)
(Hydrology--Research)

Radio - Television

Nov 51

The TR-1 Television Receiver, "V. Klison, S. Zaytsev

"Radio" No 11, pp 53-60

Description of the TR-1 television receiver, which was designed by engineers Dnyfets, Klison, and Zaytsev so that it can be constructed by radio amateurs. The set employs 13 tubes and an 18KR15 (18-715) picture tube. The latter provides a picture 105 x 135 mm in size. The set receives the 3 television programs (625 lines on carriers of

Radio - Television
(Contd)

208r75
Nov 51

49.75, 59.25, and 77.25 Mc) and the FM sound accompaniment (carriers of 56.25, 65.75, and 83.75 Mc) plus 3 long-wave and medium-wave AM broadcast stations.

208r75

USSR/Electronics - Television

Jan 53

Interference

"A Television Input Filter," V. Klibson, Leningrad

"Radio," No 1, p 43

Briefly describes a filter designed to reduce interference to the T-2 ^{TV} receiver-
receiver caused by local radio stations. The filter is connected between the antenna
jack and the rf amplifier grid of the receiver.

Klibson, V.

USSR/Electronics - Television Receivers

Card 1/1 Pub. 89 - 15/29

Authors : Breytbart, A., and Klibson, V.

Title : Television set "Avangard"

Periodical : Radio 9, 36-39, Sep 1954

Abstract : The "Avangard" television set is described. The set operates on 18 vacuum tubes and a 31L/K2 cathode-ray tube. The component parts of the set are assembled in five sectional groups. The first group, mounted on the chassis, comprises the rectifier, amplitude-selector and the vertical scanning system. The receiving part of the set belongs to the second group. The horizontal scanning system forms the third group, and the focusing and deflection system the fourth group. The loudspeakers form the last (fifth) group. The operation of the set is described in detail. Illustration; general circuit diagram.

Institution : ...

Submitted : ...

A-145-71.5
AUTHOR: Klibson, V. and Britanishskiy, R.

107-5-31/54

TITLE: "Soyuz" and "Znanya" TV Sets
(Televizory "Soyuz" i "Znanya")

PERIODICAL: Radio, 1956, No 6, pp. 35-39 (USSR)

ABSTRACT: A description of two new factory-made Soviet tv sets. They were developed in "one of the Leningrad radio-manufacturing plants". As "new" items rectangular picture tubes and elliptic speakers are featured.

Both sets are intended for 5 tv channels and also FM VHF radio reception on 64 to 73 mc. They differ in the type of picture tube used and in the acoustic system. "Soyuz" has 210 x 280 mm 38/1 K25 type picture tube, "Znanya" has 255 x 340 mm 43/1 K25 type picture tube.

Sensitivity on all channels 200 μ V or better. Horizontal definition 500 lines. Sound amplifier band 100 to 6,000 c at 1 watt.

Both tv sets are designed for 110, 127, 220-v a-c supply, and consume 125 w with tv reception and 60 w with FM radio reception.

"Soyuz" weighs 21.5 kg, "Znanya" - 25.5 kg.

Each set uses 15 tubes and 5 semiconductor diodes. Beat frequency 6.5 mc is used for sound reception. First 5 stages are used jointly for video and sound channels. Asymmetrical input is designed for a 75-ohm cable.

AUTHORS: Klibson, V., Neyman, V.

SOV/107-59-1-31/51

TITLE: The "Znamya-58" TV Set (Televisor "Znamya-58")

PERIODICAL: Radio, 1959, Nr 1, pp 33-35 (USSR)

ABSTRACT: The authors give a detailed design description of the "Znamya-58" TV set. This TV set is a modernized version of a well-known TV set "Znamya". It works on all 12 channels and is equipped with 15 tubes, 7 semiconductor diodes, and a kinescope, type "43LK2B" with 340 x 255 mm picture dimensions. Further characteristics of this set are: sensitivity - 200 microvolts; adjacent-channel selectivity - not less than 31 decibels; definition - 500 vertical and 450 horizontal lines at the center and 400 lines of each kind at the margins; video-intermediate frequency - 34.25 megacycles; tone-intermediate frequency - 27.75 megacycles; a-f amplifier band - 100 to 6,000 cycles; input power: 130 watts; casing dimensions - 520 x 495 x 475 mm; total weight: 28 kg.

Card 1/2

/ The "Znamya-58" TV Set

SOV/107-59-1-31/51

There are three tables, two diagrams, one graph, one circuit,
and one Soviet reference.

Card 2/2

KLIBSON, V.; IZYUMOV, N.; ERICHKIN, L.; ZABELIN, K. (Leningrad)

"Volna" and "Drushba" television sets. Radio no.6:33-36 Jo '60.
(MIRA 13:7)

(Television—Receivers and reception)

KLIBSON, V., insh.; IZYUMOV, N., insh.

"Volna" and "Drushba" television receivers. Radio no. 37-40
My '61. (MIRA 14:7)

(Television—Receivers and reception)

KLIBSON, V.

New television receivers. Radio no.6:6 Jo '65.

(MIRA 18:10)

trols as well as jacks for antenna connection, earphone and tape recorder inputs, a fuse plug, and panels for connecting stereo and remote control attachments. The cabinet is made from wood and plastic. The set measures 610x480x340 mm overall and weighs about 25 kg. Orig. art. has: 2 figures. [JPRS: 39,548]

SUB CODE APPROVED FOR RELEASE: 09/18/2001

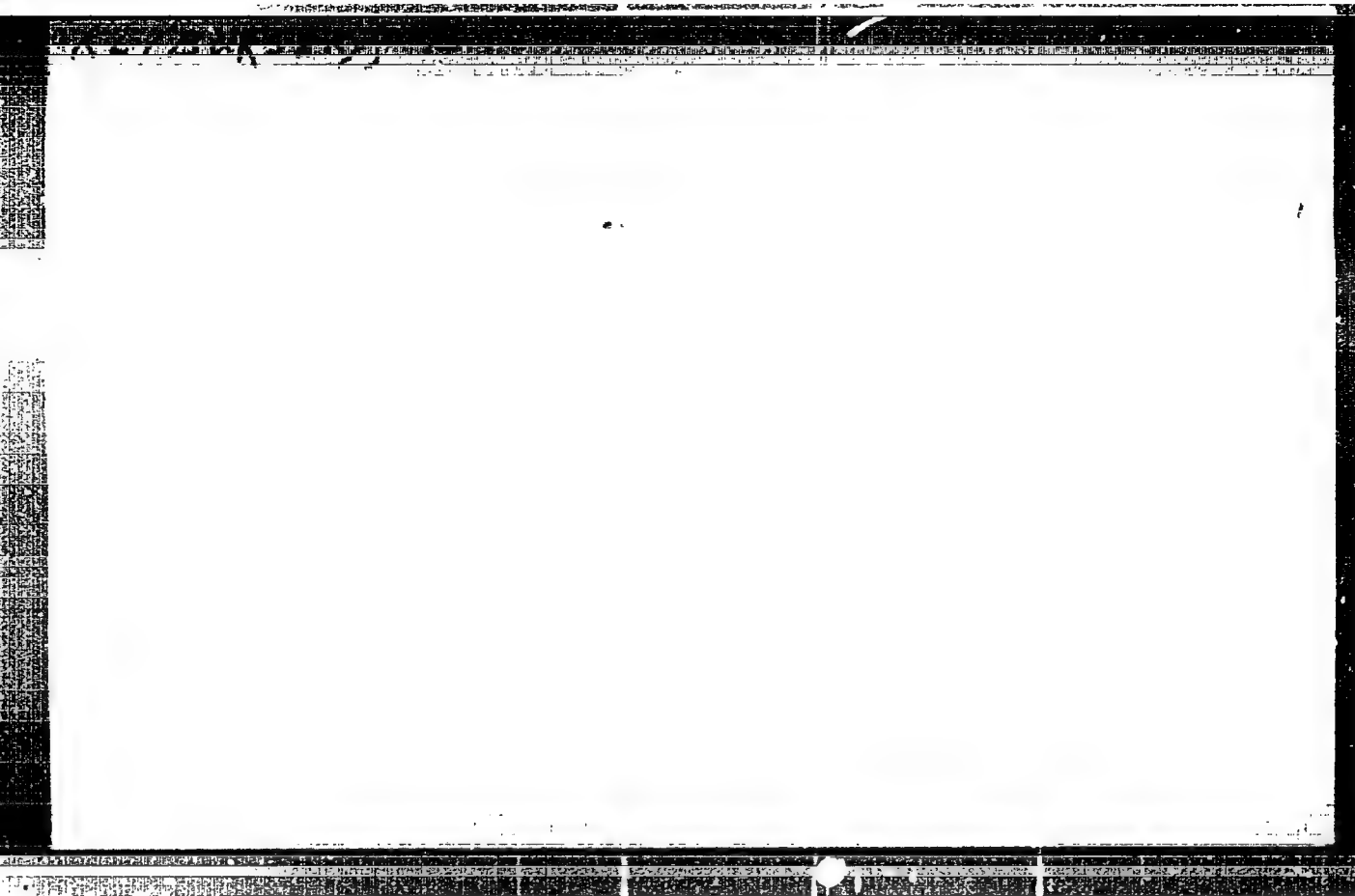
CIA-RDP86-00513R000723110006-1

Cord 1/1

09270853

"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723110006-1



APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000723110006-1"

KLIBURSZKY ~~B.~~

COUNTRY	:	HUNGARY	D
CATEGORY	:	Cosmochemistry. Geochemistry. Hydrochemistry	
ABST. JOUR.	:	IZKhim., No. 23 1959, No. 81697	
AUTHOR	:	Kliburszky, B.	
INST.	:	Hungarian Academy of Sciences - <i>Eötvös Univ., Budapest</i>	
TITLE	:	Physical Basis for Evaluation of Geochemical Potentials	
ORIG. PUB.	:	Acta geol. Acad. scient. hung., 1958, 5, No 3-4, 313-321	
ABSTRACT	:	Two terms used in geochemistry, namely, "compound potential" of Szadoczky-Kardoss and "redox potential" of Goldschmidt, have been discussed. The existence of the first term is considered to be justified*. Regarding the "redox potential," under complex geological conditions this concept becomes unreal to a certain extent, but may also be considered as justified since it reflects the relationship which existed in the surrounding	
		*since it has a definite meaning	
CARD:		1/2	

KLIBURSZKY, B.

"Physical bases for geochemical potential computations." In German, p.323.

ACTA GEOLOGICA. (Magyar Tudományos Akademia) Budapest, Hungary, Vol. 5
No. 3/4, 1958.

Monthly List of East European Accessions (EEA) LC, Vol. 8, No. 6, June 1959.
Uncl.

AUTHORS: Kleyner, E. Ye., Klibus, A. Kh.

8/77-20-3-3/66

TI TL: The Reaction of Sodium Tungstate With Stilbene-4,4'-bis-
 [(Azo-1)-3,4-Dioxibenzene]-2,2'-disulfo acid ("stilbazo")
 in Non-aqueous solutions (O vzaimodeystvii mezhdu vol'fratatom
 natriya i stil'ben-4,4'-bis-[(azo-1)-3,4-doksibenzol]-2,2'-
 disul'fokislotoy ("stil'bazo") v vodnykh rastvorakh)

ABSTRACT: Zhurnal obshchey khimii, 1959, Vol. 29, No. 3, pp. 2013-2021
 (USSR)

ABSTRACT: This disulfo acid and its diammonium salt under the name
 "stilbazo" have been proposed as reagents for the colori-
 metric determination of aluminum (Refs 1, 2). According to
 the literature data these reagents also give colored solu-
 tions with other cations and complex ions. In strongly acid
 media "stilbazo" reacts only with the complex ions of anti-
 mony, thorium, and zirconium tetrates and molybdates. The
 reaction of "stilbazo" with sodium tungstate is an example
 of the double decomposition reaction between an organic acid
 and a complex anion, and it can probably be used for the colori-
 metric determination of tungstate. This method is valuable,
 since tungstate is seldom present with the above interfering

Card 1/2

The Reaction of Sodium Tungstate with Stilbene-4,4'-
 Dis-[(Azo-1)-3,4-dioxybenzene]-2,2'-Disulfo Acid ("Stilbaz") in Non-Aqueous
 Solutions

IV/79-78-8-1/66

elements, and tungstate can be separated from molybdenum and iron in the form of tungstic acid. The results of studying photometrically the reaction between "Stilbaz" and sodium tungstate in water-iron solution are given. At a tungstate concentration of 2-6% a red-brown color is obtained. At 1 and lower concentrations a blue or violet-blue color results. The composition of the colored compound was investigated. By establishing the optimal conditions the reaction can be used for the colorimetric determination of tungstate. There are 8 figures, 1 table, and 6 references, 4 of which are Soviet.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR
 SUBMITTED: (Institute of General and Inorganic Chemistry, AN USSR)
 July 2, 1957

Card 2/2

KLIBUS A Kh.

Abstracts from (Ukrainian) EN. Institute metallurgicheskii i spetsial'nyi
spetsial'nyi

Metallurgicheskii i spetsial'nyi i nauka im. I. I. Vekshina, i spetsial'nyi
metallurgicheskii i nauka im. I. I. Vekshina, i spetsial'nyi

EN. of Publishing House: I. I. Vekshina, i spetsial'nyi, i spetsial'nyi
Metallurgicheskii i nauka im. I. I. Vekshina, i spetsial'nyi, i spetsial'nyi

Abstracts: This collection of articles is intended for scientific
workers, engineers, and engineering and technical workers in
the metallurgical, machinery-manufacturing and other branches
of industry.

CONTENTS: In this collection of articles the authors describe the
production of carbon, nitrogen and other metal-reducing com-
pounds, giving their physicochemical and mechanical properties.
Their thermal processing and the processing installations are
also described. A new method is proposed for the production of
iron from refractory compounds. Certain casting alloys are analyzed,
and the energy dissipation in materials during high-frequency
mechanical vibrations is determined. No personalization is
given. There are 1 schematic drawings, 7 diagrams, 6 tables
and 17 references, 15 of which are Soviet.

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

Abstracts: I. I. Vekshina, i spetsial'nyi. Installation for determining
the kinetics of expansion and the vapor tension of metal materials

SOV/21-59-9-14/25

AUTHORS: Babko, A.K., Member of AS UkrSSR and Klibus, H.Kh.

TITLE: Separation of Zinc and Cadmium by Dithizone and Trilon

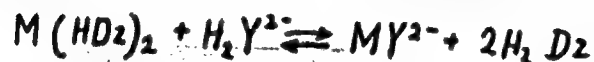
PERIODICAL: Dopovid1 Akademiyi nauk Ukrayins'koyi RSR, Nr 9, 1959, pp 991-994 (USSR)

ABSTRACT: In this paper, the authors study the problem of the reaction rate of the complex formation and state that, besides the electronic structure of the central ion complex, the retardation of the reaction of this formation may be caused by the structural properties of the addend. The retardation of the process of coordinative sphere formation is particularly noted during the interaction of metals with the ethylenediaminetetraacetic acid (EDTA). These phenomena were investigated by the authors on the example of the zinc and cadmium complex with EDTA, whereupon it was investigated by the authors on the example of the zinc and cadmium complex with EDTA, whereupon it was as-

Card 1/4

Separation of Zinc and Cadmium by Dithizone and Trilon 80V/21-59-9-14/25

certained that the new method of zinc and cadmium separation can be based on the mentioned peculiarities of the process. The equilibrium between the dithizonates of the metal $M(HDz)_2$ deluted in CCl_4 , and EDTA (ion H_2Y^{2-}) can be expressed by the equation



The constant of this equilibrium is

$$K_{\text{dion}} = \frac{[MY^{2-}][H_2Dz]^2}{[H_2Y^{2-}][M(HDz)_2]} = \frac{K_M(HDz)_2 \cdot K_1 \cdot K_2}{K_{MY^{2-}}(K_{H_2Dz}^2)^2}$$

Card 2/4

SOV/21-59-9-14/25
Separation of Zinc and Cadmium by Dithizone and Trilon

whereby $K_M(HDz)_2$ and K_{MY}^{2-} stand for constants of proper complexes; K_3 and K_4 - proper constants of the acidic dissociation of EDTA, and $K_{H_2Dz}^1$ - first constant of the dithizone dissociation. The calculation of the equilibrium constant of zinc dithizonates and cadmium with EDTA showed that the equilibrium of the reaction may be shifted to the right, in the presence of a definite excess of EDTA, more readily for cadmium than for zinc. When investigating the conditions of cadmium and zinc separation, the authors also studied the effect of the pH, temperature, and of the trilon B concentration on the reaction rate of the interaction of zinc and cadmium dithizonates with the trilon B. A method for separation of small and approximately equal quantities of zinc and cadmium, based on these experiments, has been elaborated. There are 3

Card 3/4

SOV/21-59-9-14/25
Separation of Zinc and Cadmium by Dithozone and Trilon

graphs and 3 references, 2 of which are Soviet and
1 English.

ASSOCIATION: Instytut zahal'noyi ta neorhanichnoyi khimiyi AN URSS
(Institute of General and Inorganic Chemistry of the
AS of UkrSSR)

SUBMITTED: April 25, 1959

Card 4/4

AUTHORS: Kleyner, K. Ye., Klibus, A. Kh. SOV/79-29-1-8/74

TITLE: On the Reaction of Sodium Tungstate With Stilbene-4,4'-Bis [(Azo-1)-3,4-Dioxybenzene] -2,2'-Disulfonic Acid ("Stilbazo") in Aqueous Solutions (O vzaimodeystvii meshdu vol'framatom natriya i stil'ben-4,4'-bis [(azo-1)-3,4-dioksibenzol] - 2,2'-disul'fokislotoy ("stil'bazo") v vodnykh rastvorakh)
II. The Action of Organic Solvents and the Influence of Some Salts (II. Deystviye organicheskikh rastvoriteley i vliyaniye nekotorykh soley)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 34-40 (USSR)

ABSTRACT: The authors earlier showed (Ref 1) that the dependence of the optic density (in acid mixtures of sodium tungstate and stilbazo) on the concentration of tungstate is expressed by a line which deviates from a straight one. In the present paper the action of some organic solvents was investigated in connection with this reaction in order to separate the excess stilbazo from the stilbazo tungstate compound. Apart from this the influence of some salts upon the reaction of tungstate with stilbazo was investigated in the solvent. The preparation stilbazo was purified in the same way as before

Card 1/3

On the Reaction of Sodium Tungstate With Stilbene-
4,4'-Bis [(Azo-1)-3,4-Dioxybenzene] -2,2'-Disulfonic
Acid ("Stilbazo") in Aqueous Solutions. II. The Action
of Organic Solvents and the Influence of Some Salts

SOV/79-29-1-8/74

(Ref 1). The action of some organic solvents upon the solutions and precipitations of stilbazo and the blue stilbazo tungstate compound was investigated. It was shown that on using methanol or a mixture of methanol with benzene from acid solutions the stilbazo tungstate compound can be separated from the excess stilbazo. A disturbing effect upon the reaction of sodium tungstate with stilbazo is exercised by phosphoric acid, sodium fluoride, sodium molybdate, tin salts, in contrast with nickel chloride, boric acid, borax and sodium fluorine borate which remain without an effect. Salts of alkali metals, at concentrations above 0.01-0.02 n, accelerate the above reaction and the coagulation of the stilbazo tungstate compound. The dependence of optic density on the mentioned factors can be seen on the diagrams. There are 4 figures and 1 Soviet reference.

ASSOCIATION:
Card 2/3

Institut obshchey i neorganicheskoy khimii Akademii nauk USSR
(Institute for General and Inorganic Chemistry of the Academy
of Sciences U.S.S.R.)

S/075/61/016/001/014/019
B013/B055

AUTHORS: Klibus, A. Kh. and Nazarchuk, T. N.

TITLE: Photometric Determination of Nitrogen in Titanium Carbide and -Boride and Other Refractory Materials

PERIODICAL: Zhurnal analiticheskoy khimii, 1961, Vol. 16, No. 1, pp. 79-82

TEXT: In this work, the solubility in various organic solvents of the dye formed in the thymol - hypobromite reaction on ammonia was studied with a view to finding out conditions under which the thymol-hypobromite reaction can be applied for the determination of nitrogen in titanium carbide and other refractory materials. The experiments showed that intensely colored extracts are obtained by using esters and alcohols as solvents. Of the esters and alcohols investigated, isoamyl acetate and n-butyl alcohol, respectively, were chosen. At equal nitrogen content, the latter solvent gives a much intenser color than isoamyl alcohol. The absorption curves of the dye solutions in n-butyl alcohol and isoamyl acetate are shown in Fig. 1. The optical-density measurements of the extracts were carried out

Card 1/3

Photometric Determination of Nitrogen in Titanium S/075/61/016/001/014/019
Carbide and -Boride and Other Refractory Materials B013/B055

in a universal $\Phi M(PM)$ Pulfrich photometer. The molar extinction coefficient of the dye in n-butyl alcohol is nearly 6 times that in isoamyl acetate. Thus the use of n-butyl alcohol considerably increases the measuring sensitivity. The optical density of the extracts must be measured with a red filter ($\lambda_{eff} = 665 m\mu$). The optimum pH for dye formation is illustrated in Fig. 2. The colored compound forms at pH 11 - 11.5, but the pH of the solution before addition of the reagents must be between 1.5 and 8.5, if the reaction is to proceed satisfactorily. In practice, this means that the acid solution of the test sample must be neutralized with caustic soda against phenolphthalein before adding thymol and hypobromite. When small quantities of nitrogen are to be determined, the precipitation of hydroxides during neutralization must be prevented by suitable additives. Chromium is masked best by oxalic acid, iron, titanium, and vanadium by means of potassium fluoride. Tests showed that with these masking agents, calibration curves taken in the presence of titanium, iron, chromium, and vanadium are practically identical with curves obtained under the same experimental conditions, but with pure ammonium salt solution. In consequence, a standard calibration curve plotted for the

Card 2/3

Photometric Determination of Nitrogen in
Titanium Carbide and -Boride and Other
Refractory Materials

S/075/61/016/001/014/019
B013/B055

pure ammonium salt may be used for the determination of small quantities of nitrogen in samples containing titanium, iron, chromium, and vanadium. Basing on the experimental data obtained, the authors worked out a method of determining small quantities of nitrogen (0.01 - 1%) in titanium carbide and titanium boride. Wherever possible, chemically pure reagents and bi-distilled water for preparing the solutions should be used. The only differences between the determination of nitrogen in refractory compounds containing chromium, iron, and vanadium as main constituents and the above analysis of titanium carbides and borides are the way in which the weighed portion is decomposed and the type of masking agent used to prevent hydroxide precipitation. L. N. Lapin, V. O. Geyn, and G. Ya. Vaynberg are mentioned. There are 2 figures and 8 references: 4 Soviet, 1 Dutch, 1 French, 1 British, and 1 German.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov, Kiev
(Institute of Metalloceramics and Special Alloys, Kiev)

SUBMITTED: July 13, 1959

Card 3/3

KLIBUS, A. KH.

PHASE I BOOK EXPLOITATION

807/6030

Samsonov, G. V., Corresponding Member, Academy of Sciences USSR; A. T. Filipenko, Doctor of Chemical Sciences, Professor; T. M. Mazurek, Candidate of Chemical Sciences; O. I. Popova, Candidate of Chemical Sciences; and T. Ya. Kosolapova, V. A. Obolonchik, G. Kh. Kotlyar, L. M. Kuchay, V. P. Kopylova, G. T. Kabanik, A. Kh. Klibus, K. D. Modylevskaya, and S. V. Radzikovskaya.

Analiz tugoplavkikh soedineniy (Analysis of Refractory Compounds) Moscow, Metallurgizdat, 1962. 256 p. 3250 copies printed.

Ed.: Ye. A. Nikitina; Ed. of Publishing House: O. M. Kamayeva; Tech. Ed.: A. I. Karasev.

PURPOSE: This book is intended as a laboratory manual for personnel in plant laboratories of the machinery, chemical, and aircraft industries and scientific research institutes. It can also be used by chemistry students at universities and schools of higher education.

Card 1/4

Analysis of Refractory (Cont.)

SOV/6030

COVERAGE: The book contains data from the literature and from laboratory research on the chemical and mechanical properties, crystalline structure, chemical analysis, production, and industrial and other applications of silicon carbide and other refractory compounds. Methods of determining the basic components of refractory compounds (carbon, boron, nitrogen, and silicon) are reviewed and detailed methods for the chemical analysis of all presently known refractory compounds given. The authors are associated with the Institut metallokeramiki i spetsial'nykh splavov, AN SSSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences USSR). No personalities are mentioned. There are 327 references: 175 Soviet and the remainder mainly English and German.

TABLE OF CONTENTS [Abridged]:

Foreword

7

Ch. I. General Information on Refractory Compounds

9

Card 2/4

Analysis of Refractory (Cont.)

80V/6030

9

Ch. II. Chemical Properties of Refractory Compounds

Carbides	48
Nitrides	48
Borides	60
Silicides of transition metals of Groups IV, V, and VI	64
Phosphides of transition metals	74
Sulfides of rare earths	79
Nonmetallic compounds (B ₂ O ₃ , SiO ₂ , Si ₃ N ₄ , BN, BP)	84
	86

Ch. III. Methods of Determining Basic Components of Refractory Compounds

99

Ch. IV. Analysis of Refractory Compounds

Carbides of transition and alkaline earth metals	143
Nitrides	143
Borides	174
Silicides	181
Rare-earth sulfides	210
	220

Card 3/4

Analysis of Refractory (Cont.)

80W/6030

7

Phosphides
Nonmetallic compounds

226
229

Appendix: [Water Vapor Pressure (mm Hg) at 15 to
35 °C (Table)]

248

References

249

AVAILABLE: Library of Congress

SUBJECT: Metals and Metallurgy

0

Card 4/4

EM/pw/bmc
10-30-62

SAMSONOV, G.V.; PILIPENKO, A.T., prof., doktor khim. nauk; NAZARCHUK, T.N., kand. khim. nauk; Prinimali uchastiye: POPOVA, O.I., kand. khim. nauk; KOSOLAPOVA, T.Ya.; OBOLONCHIK, V.A.; KOTLYAR, G.Kh., mladshiy nauchnyy sotr.; KUCHAY, L.N.; KOPILOVA, V.P.; KABANNIK, G.T.; KLIBUS, A.Kh.; MOIYLEVSKAYA, K.D.; RADZIKOVSKAYA, S.V.; NIKITINA, Ye.A., red.; KAMAYEVA, O.M., red. izd-va; KARASEV, A.I., tekhn. red.

[Analysis of high-melting compounds] Analiz tugoplavkikh soedinenii. Moskva, Metallurgizdat, 1962. 256 p. (MIRA 15:7)

1. Chlen-korrespondent Akademii nauk USSR (for Samsonov).
(Intermetallic compounds—Analysis)
(Nonmetallic materials—Analysis)

PYATNITSKIY, I.V.; KLIBUS, A.Kh.

**Masking effect of some polyatomic alcohols of the aliphatic series on metal precipitation reactions. Ukr.khim.zhur. 29 no.3:245-231 '63.
(MIRA 16:4)**

- 1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.
(Alcohols) (Precipitation (Chemistry)) (Metals—Analysis)**

PIATNITSKIY, I.V.; KLIBUS, A.Kh.

Photometric method for studying complexes of iron (III) and titanium (IV) with mannitol and glycerol in solutions. Ukr. khim. zhur. 29 no.4:440-449 '63. (MIRA 16r6)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Iron compounds) (Titanium compounds)
(Photometry)

FIATNITSKIY, I.V.; KLIBUS, A.Kh.

Complex formation of I_2 (M2) with glycerol and mannitol in an alkaline medium. Ukr. Khim. zhur. 29 no.5:463-472 '63. (MIRA 16:9)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

PIATNITSKIY, I.V.; KLIBUS, A.Kh.

Study of titanium complexes with glycerol and mannitol in an alkaline medium by the method of solubility using extraction.
Ukr.khim.zhur. 30 no.2:151-159 '64. (MIRA 17:4)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.

SOLTYK, V.Ya.; KLIBUS, A.V.

Automatic regulation of the blast. Lit. proisv. no.10:15 0 '63.
(MIRA 16:12)

LUZAN, P. P.; KLIBUS, A. V.

Improving the cupola process in casting cylinder sleeves,
Lit. proisv. no.10:7-9 0 '62. (MIRA 15:10)

(Founding) (Cupola furnaces)

TSIZIN, B.B.; KLIVUS, V.V.

Cupola furnace with a basic lining. Nauch. trudy Inst. lit.
proisv. AN URSR no.10:51-59 '61. (MIRA 15:6)
(Cupola furnaces)

GORSHKOV, A.A.; KLIEUS, V.V.

Cast iron saturation by chromium during its melting in cupolas
with a chrome-magnesite lining. Nauch. trudy Inst. lit. proizv.
AN URSS 11:26-32 '62. (MIRA 15:9)
(Cast iron--Analysis) (Chromium--Analysis)

KLEBS, V.V., kand. tekhn. nauk

Behavior of carbon and silicon in the basic cupola furnace
melting process. Lit. proizv. no.1:22-24, Ja '66.

(MIRA 19:1)

KLIBUS, Y. V.; GORSHKOV, A. A.

Materials for basic cupola lining. lit. preisy. no.10:13-15
0 '62. (MIRA 15:10)

(Cupola furnaces) (Refractory materials)

KLIBUS, V.Y.

Letter to the editors. Lit. proizv. no.1:47 Ja '62.
(Founding) (MIRA 16:8)

CORSHKOV, Andrey Andreyevich; ZATULOVSKIY, Sergey Semenovich, inzh.; RUDENKO, Nikolay Grigoriyevich, inzh.; VOLOSCHENKO, Mikhail Vasil'yevich, kand. tekhn. nauk; KLIEUS, Vladimir Vasil'yevich, inzh.; LUZAN, Petr Petrovich, kand. tekhn. nauk; KRAMARENKO, Oksana Yur'yevna, kand. tekhn. nauk; KULIKOVSKAYA, Ol'ga Varfolomeyevna, inzh.; FILATOVA, T.A., red.

[Cast iron with spheroidal graphite treated by rare-earth modifiers; problems of theory and practice] Chugun s sharovidnym grafitom, obrabotannyyi redkozemel'nyimi modifikatorami; voprosy teorii i praktiki. Kiev, Naukova dumka, 1964. 161 p. (MIRA 17:11)

1. Akademiya nauk URSS, Kiev. Institut problem lit'ia.
2. Chlen-korrespondent AN Ukr.SSR (for Gorshkov).

KLIBUS, V.V., kand. tekhn. nauk

Regulating slag conditions in the basic cupola furnace.
Mashinostroenie no.5:57-59 8-0 '65. (MIRA 18:9)

VECHERYA, B.O.; KLIBUS, Yu.V.

New grade of stainless steel. Lit.proizv. no.9:43-44 8 '62.
(MIRA 15:11)
(Steel, Stainless)

KHAN, B.Kh.; TARANOV, Ye.D.; Prinimali uchastiye: ALEKSANDROVICH, L.B.;
GITARTS, G.M.; KLIBUS, Yu.V.; NOBOVA, Ye.M.; REZENBLAT, I.M.;
KHACHT, A.I.

Decoxidation and alloying of acid electric steels in the ladle.
Izv. vys. ucheb. zav.; chern. met. 6 no.4:50-55 '63. (MIRA 16:5)

(Steel—Electrometallurgy)

KLIC, Karol, ins.

Ship resistance in the flowing water of a small depth.
Stroj cas 13 no.51474-486 '62.

PEKAREK, Frantisek, inz.; KLIC, Karol, inz.

Fifth National Conference of the Departments of Mechanics
and Elasticity, and the Third Regional Conference on
Mechanisms in Liberec. Stroj cas 15 no.2:198-200 '64

KLIC, R.

MAHUNKY, K., As., MUDr.; KLIC, R., MUDr.; KROPACEK, J., As., JUDr.;
DLUHOS, M., Doc., MUDr.

Successful therapy of an islet cell tumor with an extraordinary
symptomatology. Hoshl. chir. 35 no.12:727-732 Dec 56.

1. Psych. klin., (for Klic) 1. chir. klin. (for Kropacek)
pathologicko-anatom. ustav (for Dluhos).

(ISLANDS OF LANGHANS, neoplasms
unusual cases (Cs))

KLICH, Adam, dr inż.

Development in the design of hoisting installations in Upper
and Lower Silesia: Przegł mech 23 no. 3:88 10 F '64.